

REMARKS

This amendment is submitted in response to the final Office Action mailed September 6, 2007 ("Office Action"). After entry of this Amendment, claims 22-29 will be pending. Claim 22 is independent. Claims 1-21 and 30-35 were previously withdrawn.

Claim 22 has been amended to recite "[a] system for coating a stent" comprising "a coating material source containing a coating material comprising a solvent and a biologically active material comprising an antibiotic or an antiproliferative agent" Support for this amendment is found at paras. [0034] (stent), [0054] (solvent), and [0058] (antibiotic or antiproliferative agent) of the specification as filed. No new matter has been added.

Reconsideration of the present application in view of the above amendments and following remarks is respectfully requested.

I. Rejections Under Section 103(a)

In the Office Action, the Examiner:

- rejected claims 22-28 under 35 U.S.C. § 103(a) ("Section 103(a)") as allegedly unpatentable over Japanese Patent No. 11-111423 to Shibata ("Shibata") in view of U.S. Patent No. 3,867,315 to Tigner *et al.* ("Tigner"); and
- rejected claim 29 under Section 103(a) as allegedly unpatentable over Shibata in view of Tigner further in view of the "radiation curing" entry of the Kirk-Othmer, Encyclopedia of Chemical Technology 3rd Ed, vol. 19, pp. 607-624 (1982) ("Kirk-Othmer").

Before addressing the details of the Examiner's specific rejections, Applicants first submit that the references cited by the Examiner are from nonanalogous arts. Amended independent claim 22 recites "a system for coating a stent" with "an antibiotic" or "an antiproliferative agent." One interested in systems for coating stents would not look to systems for coating spark plugs (such as the system of Shibata) or highly-conductive resinous compositions (such as the compositions of Tigner). Indeed, the Examiner concedes that neither Shibata nor Tigner discloses, teaches, or suggests a system for coating medical devices. (Office Action at 3.) A stent is a medical device, and in particular, a small and delicate medical device that must be handled with greater care than one would handle spark plugs. Further, when deciding what coatings to use for a medical device, one skilled in the art would not look to the art of electrical devices (such as Tigner).

A. Claims 22-28 are Patentable over Shibata in view of Tigner

Claims 22-28 are rejected under Section 103 as obvious over Shibata in view of Tigner. Applicants respectfully submit that this rejection should be withdrawn.

Amended claim 22 recites a system for coating a stent that includes “a coating material source containing a coating material comprising solvent and a biologically active material comprising an antibiotic or an antiproliferative agent” Shibata does not disclose, teach, or suggest coating material source containing a coating material comprising a biologically active material, as recited in claim 22. Shibata does not even disclose or suggest the use of a biologically active material, let alone “an antibiotic” or “an antiproliferative agent.” Instead, Shibata is directed to a spark plug, and more particularly, to a method of forming a conductive film on a spark plug that includes applying conductive paste 390 to roller part 201. (Abstract.)

Tigner fails to remedy the deficiency of Shibata, as it also does not disclose the use of “a coating material source containing a coating material comprising solvent and a biologically active material comprising an antibiotic or an antiproliferative agent” Tigner discloses neither a solvent nor an antibiotic or antiproliferative agent. Thus, Shibata and Tigner, alone or in combination, fail to disclose each and every element of claim 22. Thus, claim 22 is patentable over Shibata and Tigner for at least this reason.

Indeed, Tigner teaches away from the use of biologically active compounds comprising an antibiotic or an antiproliferative agent. Tigner’s compositions are either formed at temperatures “in the range of about 300° to about 600°F” or activated by applying sufficient heat after fabrication. (Col. 4, lines 2-10.) Such temperatures/heat would have an adverse affect on the antibiotic or antiproliferative agent. **[[PLEASE CONFIRM]]** Claim 22 is therefore patentable over Shibata and Tigner for this additional reason.

In addition, one skilled in the art would not seek to combine Tigner with Shibata. First, Tigner does not suggest to one of ordinary skill in the art that its composition can be used along with a roll-coating system such as the one disclosed in Shibata. Instead, Tigner teaches fabricating its composition by “methods including molding such as injection and compression molding, extrusion, die casting and the like.” (Col. 4, lines 41-43.) In fact, Tigner’s composition is not even suitable for use with a roll-coating system, because it is “normally solid or semisolid.” (Col. 2, lines 29-30.) Second, to the extent Shibata discloses the use of a “solvent” as recited in claim 22, one would not be motivated to combine the

compositions of Tigner with a solvent, because then the compositions of Tigner would no longer be "solid or semisolid." Consequently, one of ordinary skill in the art would not be motivated to combine Shibata and Tigner to arrive at the invention of claim 22. Claim 22 is therefore patentable over Shibata and Tigner for this additional reason.

Thus, the rejection of independent claim 22 should be withdrawn. Because claims 23-28 depend from claim 22, the rejection of claims 23-28 should be withdrawn for at least the same reasons that the rejection of claim 22 should be withdrawn.

Additionally, dependent claim 23 recites that "the second roller is rougher than the surface of the first roller." Applicants respectfully disagree that Shibata discloses, teaches, or suggest this recitation. The Examiner submits that the "surface of the second roller (301) is rougher than the surface of the first roller (201) because the second roller has protrusions thereon as illustrated in Fig. 4a/b relative to the smooth surface of the first roller (201)." (Office Action at 2.) First, Applicants respectfully disagree that the surface of element 301 can be termed "rough[]" because of the protrusions. A few isolated protrusions on an otherwise smooth surface do not make an otherwise smooth surface rough. Shibata fails to teach that the surface itself of element 301, aside from the protrusions, is rough, or any different in roughness from the surface of element 201. In any case, Applicants respectfully disagree that Fig. 4a shows a smooth surface for element 201. Instead, it shows a surface with paste receptacles 201a (i.e., recesses) corresponding to the protrusions of element 301. These recesses happen to be filled with conductive paste 390 (coating material). (See Figs. 4a-b; Translation of para. [0045]-[0046], attached hereto as Appendix A.) Thus, the rollers have equally rough (or smooth) surfaces. Tigner, which does not discuss roll coating or a device for roll coating, fails to remedy this deficiency. Thus, claim 23 is patentable over Shibata and Tigner for this additional reason.

Accordingly, claims 22-28 are believed to be patentable. Thus, withdrawal of this rejection and allowance of claims 22-28 are respectfully requested.

B. Claim 29 is Patentable over Shibata in view of Tigner and Kirk-Othmer

Claim 29 is rejected under Section 103(a) as obvious over Shibata in view of Tigner in further view of Kirk-Othmer. Applicants respectfully traverse this rejection.

Claim 29 depends indirectly from claim 22. For the reasons explained above, claim 22 is patentable over Shibata in view of Tigner. In particular, the combination of Shibata and Tigner does not teach or suggest a system for coating a stent, let alone, a system for coating a

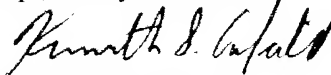
stent that includes "a coating material source containing a coating material comprising solvent and a biologically active material comprising an antibiotic or an antiproliferative agent," as recited in claim 22. Kirk-Othmer does not remedy this deficiency. Therefore, Shibata, Tigner, and Kirk-Othmer do not disclose, teach, or suggest the system of coating a stent as recited in claim 22. Accordingly, Applicants respectfully request that the rejection of claim 29, which depends from claim 22, be withdrawn for at least this reason.

CONCLUSION

It is believed that claims 22-29 are in condition for allowance. Should the Examiner not agree with any of Applicants' positions or arguments herein, a telephonic or personal interview is respectfully requested to discuss and resolve any remaining issues.

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Respectfully submitted,



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APPENDIX A

[0045] Regard the rotation direction A of roller part 201 of stamp roller 200 as a prescribed direction, set the rotation direction B of roller part 301 of transfer roller 300 in the opposite direction to the above-mentioned rotation direction A, and set the rotation direction C of cleaning roller 400 in the opposite direction to the above-mentioned direction B. By this, conductive paste 390 supplied from paste supplying part 101 is received by the paste receptacle 201a in sequence from the front of rotation direction A. Then, by using paste scraping means 500, scrape the excessive conductive paste 390 in paste receptacle 201a, thus the predetermined amount of conductive paste 390 is held in paste receptacle 201a (paste supplying process).

[0046] Then, the conductive paste 390 held in paste holding section 201a is transferred to the peripheral part of roller part 301 of transfer roller 300. Because roller part 301 is formed of an elastic deformable material, the periphery of roller part 301 attaches itself tightly to bite into concave paste receptacle 201a. Thus, conductive paste 390 held in paste receptacle 201a is transferred well to the periphery of roller part 301. By this, as shown in Fig 4(c), conductive paste 390 is pasted on the side circumference of roller part 301 in the prescribed shape which corresponds to the shape of second site 39b of conductive film 39 (pasting process).